FULTON COUNTY WATER AND SEWER NOTES



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Project Name:		
Project Number:		
Date:	Reviewed By:	

(UPDATED: JUNE 2023)

Add to Standard Details

Fulton County requires the following Sewer and Water notes to be included in all projects that involved connection to the Fulton County's sanitary sewer and/or potable water systems respectively. If there is a conflict between Fulton County Notes and the General Notes, then priority shall be given to Fulton County Notes.

Sanitary Sewer Notes

- 1. All wastewater pipe construction shown on these plans must conform to Fulton County's Standards and Specifications. Standard details 100 Series 800 Series.
- 2. No sanitary sewer shall be accepted by the County without an as-built drawing showing the horizontal and vertical alignment of the sewer system, the location of all manholes, sewer connections, piping materials, required easement limits and junctions, and property lines.
- 3. Contractor must field verify the location and elevation of all known and unknown underground utilities.
- 4. All temporary and permanent wastewater easements must be dressed and grassed to control erosion prior to acceptance. Trees shall not be planted in the permanent easement area, or within 10-feet of a Fulton County sewer main. Standard Detail 704.
- 5. As-built drawings and maintenance bond(s) must be submitted and are required prior to inspection and acceptance. Digital as-built will be required. Note that digital as-builts will be required at the completion of the project. Please see: <u>https://www.fultoncountyga.gov/services/water-services/development-permitting/inspection</u> for the requirements Maintenance bonds are due at final approval of the as-builts.
- 6. MAXDAPTOR Sewer repair universal couplings are required for joining different types of sanitary sewer pipes.
- 7. Pools shall not drain into Fulton County sewer system, unless authorized by the Director. A variance may be granted, with a backwash or drainage discharge limit of 50gpm.

- 8. Low pressure air testing required for all wastewater pipe systems. This test must meet all requirements as outlined in UNI-B-06 or current revision. A Fulton County Inspector must be present during testing.
- 9. Contractor shall field verify the locations and invert elevations of wastewater pipes for a connection to existing wastewater systems.
- 10. Please add the following notes for all applicate manholes.
 - a. Add notes to existing manholes
 - 1. Contractor to field verify the location and invert of the existing wastewater line prior to construction.
 - 2. Remove and replace the existing invert to accept the new line as required in the field.
 - 3. Core for new lateral from the inside of the manhole in the presence of the inspector.
 - 4. New drop line to enter manhole at 0.44-feet above the effluent invert.
 - 5. Rebuild the water table and invert with rowlock bricks to direct the runoff from the new line to existing effluent invert.
 - 6. Rehabilitate existing manhole as required in field to bring manhole into compliance with Fulton County Standards and Regulations.
 - b. Add notes to doghouse manholes
 - 1. Contractor to field verify the location and invert of the existing wastewater line prior to construction.
 - 2. The Contractor is to cut and remove the top half of the pipe only upon final approval by the Fulton County Inspector.
 - 3. The new influent line is to enter the structure a minimum of 0.53- feet above the effluent elevation to allow new water table to be built.
 - 4. Build the water table and invert with rowlock bricks to direct the runoff from the new lines to existing effluent invert.
- 11. Contractor is to cut and remove the pipe only upon final approval by the Fulton Count Inspector.
- 12. All wastewater lines and laterals with less than 18-inches of clearance to another utility line shall be constructed of a minimum of DR17 HDPE pipe in DIPS (ductile Iron pipe size).
- 13. No fill shall be placed on a sanitary sewer easement without approval by the Deputy Director of Sewer.
- 14. All sanitary manholes must extend to the ground surface. All manholes outside of roadways and ROW shall be a minimum 18-inches aboveground and shall be shown in sanitary sewer profile. If a manhole is in a flood plain or high-water area, they shall have watertight covers and extend above the 25-year floodplain level (clearly indicate and provide details). Manholes flush with the ground may be allowed, on a pre-approved basis.
- 15. For all projects utilizing individual onsite wastewater management (septic) systems design and provisions shall be in conformance with Fulton County Board of Health regulations.
- 16. 8-inches or larger pipelines shall be CCTV inspected. A virus free portable storage drive (USB Flash Drive) and written inspection log shall be provided when as- builds are submitted.
- 17. USF 7635 Box required for wastewater cleanouts in paved area per Fulton County Standard Detail 709.
- 18. Compaction of the back fill of all trenches shall be compacted to at least 90% Standard Proctor density. Backfill material shall be free from roots, stumps, or other foreign debris, and shall be placed at or near optimum moisture content. Correction of any trench settlement within 36 months from the effective date the bond acceptance will be the responsibility of the developer. Compaction of the back fill of all trenches located under pavement shall be compacted to at least 95% Standard Proctor density.

- 19. Sanitary sewer laterals should be marked with 4"x4" post with min. 4-feet above ground. The top 1-foot should be painted green. Each lateral is to be brought to the ground surface in accordance with Fulton County Standard detail 711.
- 20. All required off site easements shall be dedicated to Fulton County prior to Utility permitting.
- 21. All public on site easements for other than single family residential projects that will be final platted shall be dedicated to Fulton County prior to plat approval.
- 22. For residential projects where onsite sanitary sewer easements are to be dedicated to Fulton County, the following applies: Sanitary sewer easement inside property line to be shown in final plat for recording.
- 23. For all projects containing PVC wastewater pipes, also include the following notes: (see attached condition for PVC).
 - a. Pipe shall be ASTM D3034, SDR35 in 12.5-foot laying lengths with elastomeric sealed joints in accordance with ASTM D3212.
 - b. Pipe bedding shall be #57, sharp, angular, crushed stone. Bedding shall extend a minimum of 4-inches below the pipe and extend to the top of the pipe. The bedding shall be compacted by ``slicing with a flat shovel''. The width of the ditch must be in accordance with OSHA Safety Standards.
 - c. Initial backfill: After bedding, complete initial backfill with #57 stone. If no rock is encountered, initial backfill shall extend to a height 6-inches above of the top of the pipe, otherwise initial backfill shall extend to 12-inches above the top of the pipe.
 - d. Fittings for lateral connections shall be 45° WYES and bends. Provide PVC pipe stoppers for each lateral. Provide special watertight connections at manholes and transitions to ductile iron pipe as recommended by the pipe manufacturer.
 - e. After installation, a deflection test is required. Initial deflection shall be limited to 3% of the undeflected diameter. A second test shall be made at least 8 months after the installation but before final acceptance. At that time deflection shall be limited to 5% of the undeflected diameter.
- 24. All manholes located within a paved area shall have concentric cone sections and flange down frames and covers. All manholes located within an unpaved area shall have eccentric con sections with bolt down flange up composite frame and covers. All manholes located within a flood prone area shall have eccentric cone sections and watertight composite ring and cover. with bolt down gasketed flange up frame and covers. Raise top of manholes in landscape areas to 0.5-feet above grade.
- 25. Any changes to the sewer drawings must be approved by Fulton County.
- 26. Notify Fulton County Inspector 3-days prior to construction.

Water Notes

- 1. All public water lines shall be marked with a continuous Electronic Marking System (EMS) Caution Tape, at a maximum burial depth of 2-feet directly above the water line located below the tape (3M Path Marking Tape Model #80 6116 16220 7613).
- Water valve markers shall be placed at all locations where water valves are not in the streets. Water valves located on the street will be marked with an engraved "V" on top of curb and on the curb gutter. The opening of the "V" will face the valve.
- 3. All temporary and permanent water easements must be dressed and grassed to control erosion prior to acceptance. No trees will be allowed to be planted in utility easements or within 10-feet of a public water main.
- 4. As-built drawings and maintenance bond(s) must be submitted and are required prior to inspection and acceptance. Note that digital as-builts will be required at the completion of the project. Please see for the requirements: <u>https://www.fultoncountyga.gov/services/water-services/development-permitting/inspection</u> Maintenance bonds are due at final approval of the as-builts.
- All distribution piping and appurtenant materials used in the Fulton County Water System must be made of Ductile Iron and comply in respect to ANS/AWWAA21.111/C111-85 Standard Specifications. Plans that do not meet the specifications in all respects will not be accepted. All lines should be Class 51, (or greater when requested by the County).
- 6. Contractor is responsible to verify the location and depth of the existing water lines prior to construction.
- 7. Required 18-inches vertical separation between proposed water lines and other existing and proposed utilities lines shall be verified during construction.
- 8. If existing water service line is to be removed and abandoned, the service shall be removed back to the corporation stop and capped at the water main line in the presence of the inspector. Other existing and abandoned water service structures will be removed in the presence of the inspector.
- 9. Water meter boxes are to have 1-inch Type "K" Copper service line; developer is responsible for properly sizing service line and meter. The service line must be continuous from the main to the water meter and shall have a minimum cover of 48-inches. All joints shall be flared. The service line shall connect to the main line with a direct tap with a corporation cock with a minimum of 18-inches between taps.
- 10. Water meter box shall be a polyethylene meter box (Model 1219-18-1MKF deep) with polyethylene lid (Model 1219-1-MKF deep). Lid for stretch yoke box shall be DFW Model 6514-1-MKF deep with oblong knock out and ½-inch recess for meter antennae with a ferrous magnet in the lid and a plastic locking mechanism.
- 11. For residential subdivisions: No individual meters are to be placed in a concrete sidewalk or driveway. Meters must be maintained in grass areas.
- 12. The contractor shall install polyethylene water meter boxes and 1-inch type "k" copper service lines for all services including cul-de-sacs. 5/8" X ¾" meters are the standard size for a residential house, however developer is responsible for properly sizing service line and meter.
- 13. Lot lines will be clearly identified and marked on top of curbs before the water main is installed.
- 14. A 6-inches PVC conduit shall be used to access all lots on opposite sides of the street, except in cul-de-sacs. Conduit across the road, for installation of water services, is to be installed by the developer prior to paving. Material for conduit shall be 6 inches PVC pipe or approved alternate and is to be installed with a minimum of 4

feet below final grade. No split connection allowed. Two water lines may use the same conduit.

- 15. Thrust blocking or restraint will be used at all bends, plugs, tees, and fire hydrants.
- 16. Fire hydrants shown in the radius of a curve shall be field adjusted so that the actual installation of fire hydrants will be outside of curve radius.
- 17. All sampling stations and automatic flushing stations shall be metered and installed per Fulton County specifications. Fulton County to own and maintain sampling stations and flushing units.
- 18. All lines 6-inches diameter or greater must be pressure tested at 250 psi for a minimum of two (2) hours.
- 19. Water taps, service lines, and meter boxes in residential subdivisions will be installed by the developer per current Fulton County specifications.
- 20. All required off site easements shall be dedicated to Fulton County prior to Utility permitting. All public on-site easements for other than single family residential projects that will be final platted shall be dedicated to Fulton County prior to Water Resources permit approval.
- 21. For residential projects where onsite water easements are to be dedicated to Fulton County, Water easement inside property line to be shown in final plat for recording.
- 22. Any changes to the water drawings must be approved by Fulton County.
- 23. Notify Fulton County Inspector 3-days prior to construction.